

Fig. 1

THE AMOUNT OF ADDED W (MASS PERCENT)

THE AMOUNT OF PRECIPITATED W (MASS PERCENT)

Fig. 2

Fig. 3

TEMPERATURE (°C)

TIME (SECOND)

FREE THERMAL EXPANSION

STRAIN CONTROL

RESTRAINT RATIO

Fig. 4

THERMAL FATIGUE LIFE (TIMES)

THE AMOUNT OF PRECIPITATED W (%)

SAMPLE:0.005C-0.07Si-1.02Mn-15.2Cr-1.92Mo-3.02W
-0.51Nb-0.004N STEEL

Fig. 5

THE AMOUNT OF PRECIPITATED W (%)

HOT-ROLLED-SHEET ANNEALING TEMPERATURE (°C)

TOUGHNESS OF HOT ROLLED AND ANNEALED SHEET

OK:CHARPY ABSORBED ENERGY AT ROOM TEMPERATURE $\geq 15\text{J}/\text{cm}^2$

NG:CHARPY ABSORBED ENERGY AT ROOM TEMPERATURE $< 15\text{J}/\text{cm}^2$

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Fig. 1

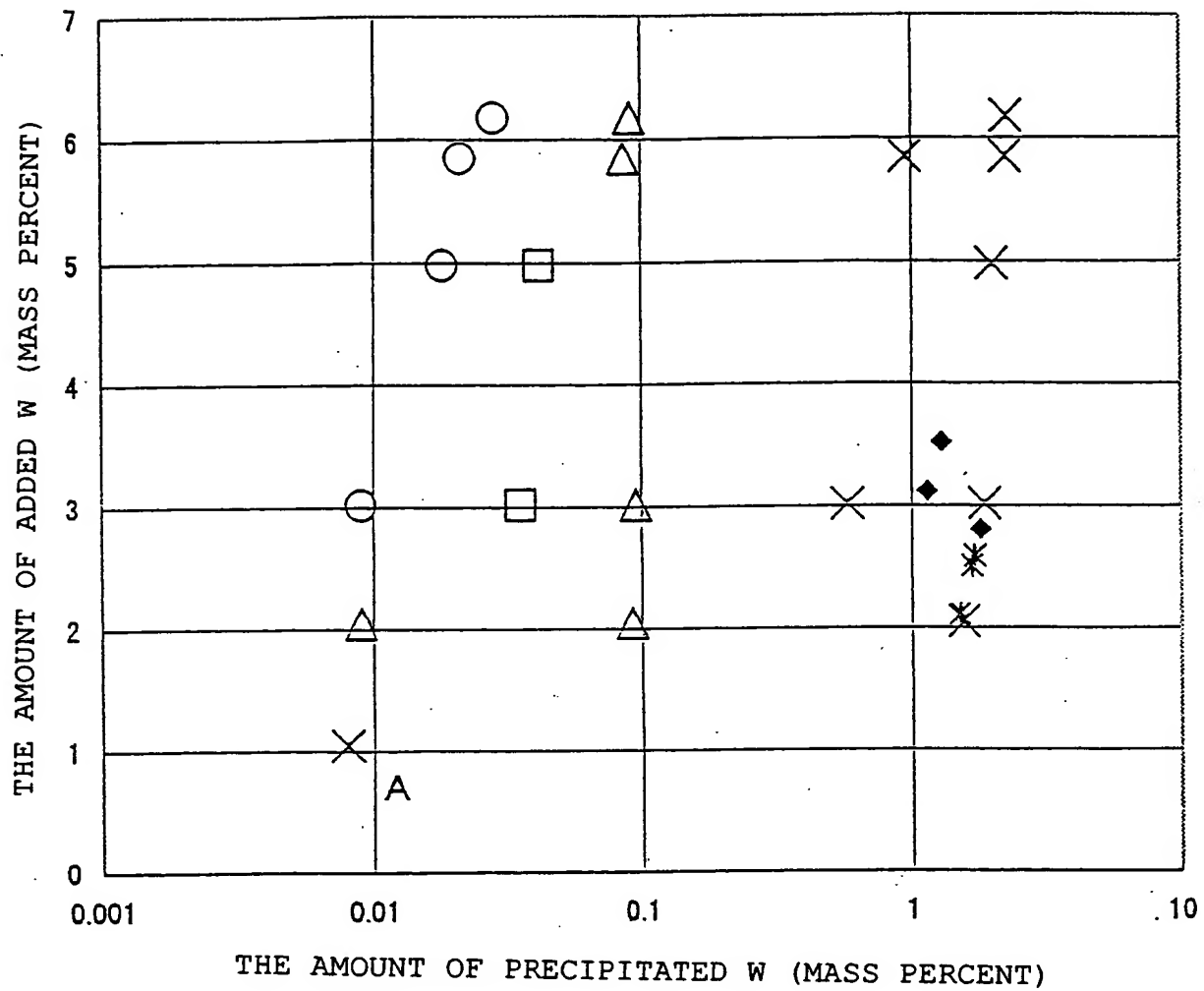


Fig. 2

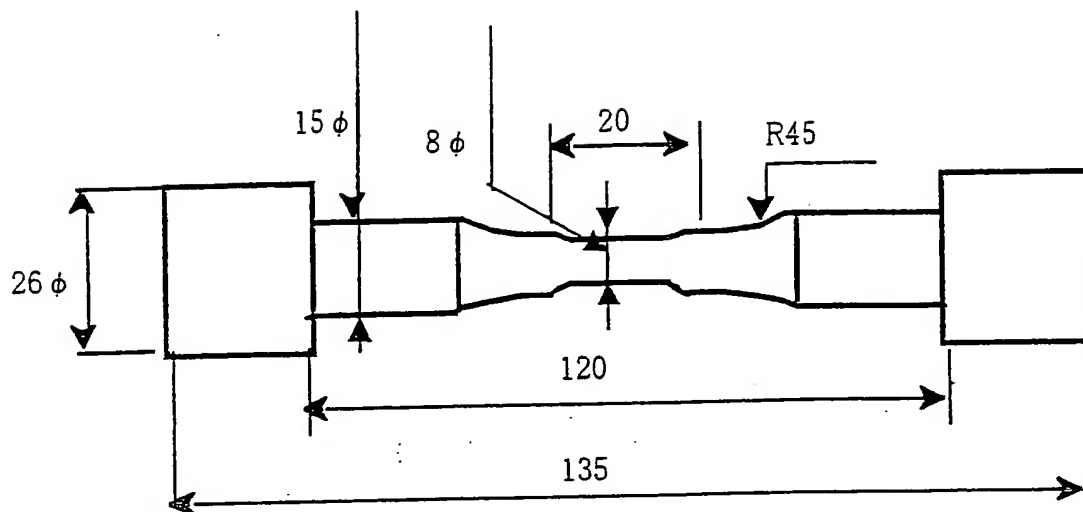


Fig. 3

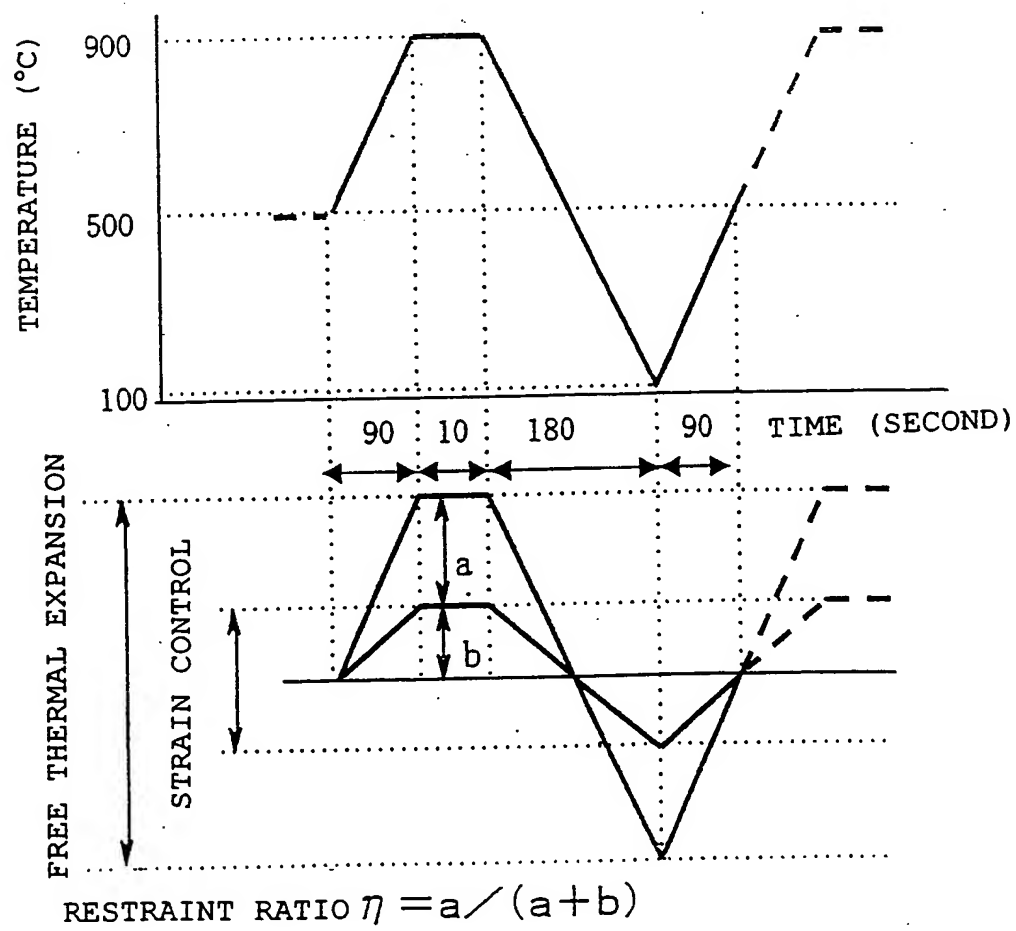


Fig. 4

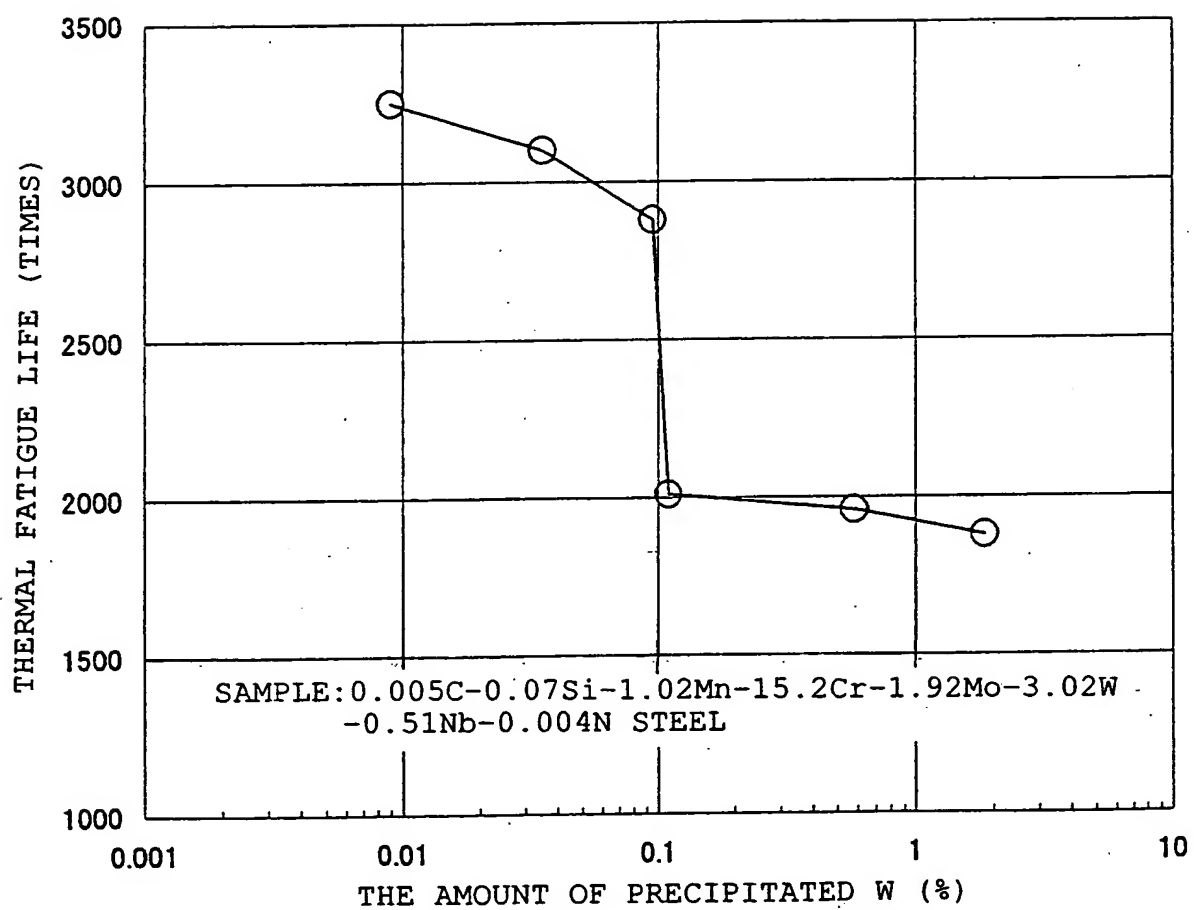


Fig. 5

